UCL Study

programme

2021 - 2022

UCLouvain

Additional module in computer science

Table of contents

APPSINF - Introduction

Introduction

Introduction

This additional module in Computer Science offers:

• a deepening and broadening of knowledge and skills in different areas in computer science

• to study and deepen further themes not addressed in the major course.

Therefore, the additional module in computer science does not anticipate courses normally present within the master in computer science.

Most of the activities proposed in this additional module are oriented towards informatics for organizational business needs. Various themes are addressed as the place of information systems in business, project management, taking into account non-technical issues in the company, the interface between man and machine ...

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APPSINF - Teaching profile

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Learning outcomes

To extend and / or improve their knowledge and skills related to different areas in computer science

To deploy them to study in depth an issue or complex computer system,

To possibly facilitate the choice of options in the master's program.

On successful completion of this programme, each student is able to :

Compl-disc.1. master the knowledge and extensive expertise in different areas in computer science to possibly facilitate the choice of the options in the master's program.

• Perceive the role of information systems in enterprises

o describe the operation of an information system in enterprises;

o design and develop an information system and justify the design choices in relation to the enterprise organisation and needs ;

o analyse and adapt an existing information system;

Compl.discpl.2. Develop a thorough understanding of human-computer interaction in a computer system.

• Develop quality human-machine interface that meets the user expectations

o describe the issues of interaction between man and machine;

o design and develop a software interface and justify the design choices in relation to the issues of man-machine interaction;

o analyse and adapt an existing interface to better meet the challenges of human-computer interaction

Compl-discpl.3. Demonstrate and operate pertinently a broader range of tools within computer science in a project team (developing transversal competences)

• Rely on its non-technical skills to contribute to the advancement of an IT project

• make a convincing demonstration of software;

• present a convincingly product based on multimedia support;

• work effectively in small groups;

• know the managerial, human and economic challenges of managing an IT project and master some tools and methods to manage.

Programme

DETAILED PROGRAMME BY SUBJECT

> O Mandatory
> ⌧ Optional
> △ Not offered in 2021-2022
> ⊘ Not offered in 2021-2022 but offered the following year
> ⊕ Offered in 2021-2022 but not the following year
> △ ⊕ Not offered in 2021-2022 or the following year
> 🟨 Activity with requisites
> [FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

30 crédits

				Year	
				2	**3**

O *Content:*

O **Cours obligatoires**

					Year 2	Year 3
O LINFO1212	Advanced computer science project	Siegfried Nijssen	[FR]	[q1] [30h+30h] [5 Credits]	x	
O LINFO1311	Human Machine Interface	Jean Vanderdonckt	[FR]	[q2] [30h+15h] [5 Credits]	x	
O LINFO1210	Information systems and IT project management	Manuel Kolp	[FR]	[q2] [30h+15h] [5 Credits]	x	
O LINFO1122	Program design methods	Charles Pecheur	[FR]	[q1] [30h+30h] [5 Credits]		x
O LINFO1131	Concurrent programming concepts	Peter Van Roy	[EN]	[q1] [30h+30h] [5 Credits]		x

Year

| 2 | 3 |

o Choice Courses of the additional module in computer sciences

The student completes his program by choosing one of following courses

⌘ LLSMF2013	Data Analytics applied in Business	Manuel Kolp Marco Saerens	EN [q2] [30h] [5 Credits]		x
⌘ LINMA1702	Optimization models and methods I	François Glineur	FR [q2] [30h+22.5h] [5 Credits]		x
⌘ LINFO1225	Object-oriented design and data management	Kim Mens	FR [q2] [30h+30h] [5 Credits] △	x	

THE PROGRAMME'S COURSES AND LEARNING OUTCOMES

For each UCLouvain training programme, a reference framework of learning outcomes specifies the the skills expected of every graduate on completion of the programme. Course unit descriptions specify targeted learning outcomes, as well as the unit's contribution to reference framework of learning outcomes.

APPSINF - **Information**

Access Requirements

This option additional module in computer sciences is accessible only to students enrolled in the Computer Science Bachelor program.

Evaluation

The evaluation methods comply with the <u>regulations concerning studies and exams</u> (https://uclouvain.be/fr/decouvrir/rgee.html). More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".

Possible trainings at the end of the programme

This option does not give direct access to a Masters program. However, since this option is reserved for bachelor students in computer science, these students obviously have access to the Masters program in Computer Science.

Contacts

Curriculum Management

Entity

Structure entity	SST/EPL/INFO
Denomination	(INFO)
Faculty	Louvain School of Engineering (EPL)
Sector	Sciences and Technology (SST)
Acronym	INFO
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Useful Contact(s)

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